

What is claimed is:

1. A computer-implemented method of finding the closest match between a first object and N objects comprising the steps of:

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    selecting a small number M of the N objects;
    for each of the objects M determining its metric
distance to all the other N objects;

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for each of the objects M, making an ordered list of the metric distances between that object and all the other N objects;

determining the metric distances between the first object and each of the M objects,

determining the metric distances between the first object and the objects on the ordered list associated with the object M that has the shortest metric distance between it and the first object,

said metric distances being determined beginning with the object on the list that has the shortest metric distance between it and the object M and continuing such determination with objects having increasingly greater metric distances from the object M until an object is reached that has a metric distance from the object M that is more than twice the metric distance from the first object to the object M.